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REMARKS

Claims 1, 2 and 14-33, with claims 1, 14 and 22 being independent claims, are pending and presented for examination in the subject application.

Applicants have hereinabove amended claim 23 to clarify the invention Applicants regard as their invention, without narrowing the scope of the claim. Applicants maintain that no new matter is presented by this amendment. Accordingly, Applicants respectfully request that this Amendment be entered.

Rejection under 35 U.S.C. §112, second paragraph

In Section 3 of the December 4, 2002 Office Action, claim 23 was rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

The Examiner stated that claim 23 recites the limitation "said angle at which the second detection means" in lines 1-2. The Examiner further stated that there is insufficient antecedent basis for this limitation in the claim.

In response, without conceding the correctness of the Examiner's position but solely to advance the prosecution of the subject application, Applicants have hereinabove amended claim 23 to place the claim in better form for examination, without narrowing the scope of the claimed invention.

Applicants respectfully submit that amended claim 23 clearly recites the subject matter Applicants regard to be the invention. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 23 under 35 U.S.C.

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§112, second paragraph.

**Rejection Under 35 U.S.C. §102(b)**

In Section 5 of the December 4, 2002 Office Action, claims 1, 2 and 14-33 were rejected under 35 U.S.C. §102(b) as purportedly anticipated by U.S. Patent No. 5,796,480 to Igushi (hereinafter "Igushi '480").

Regarding claims 1, 2, 14-18 and 22, the Examiner stated that Igushi '480 teaches a particle size distribution analysis apparatus comprising a sample measurement zone or a measuring flow cell contained a sample of particles, a light emitting means is considered to be a laser device for providing a light incident upon the sample measurement zone, and at least a first detection means and a second detection means for measuring light levels at particular scattering angles and output signals to a computation means enabling a particle size distribution of particles contained within the sample to be determined, wherein the computation means of is calculated the particle size distribution taking into account, for each of the scattering angles, reflection, by at least on window of the measurement zone, of light that previously been scattered by the particles.

Regarding claims 23 and 24, the Examiner stated that Igushi '480 teaches that the angle at the second detection means, which is inclined relative to a beam of the light emitted from the light emitting means, is equal to 180 degrees minus (-) the angle at the first detection means which is inclined relative to the beam of light and the computation means for modifying the measurements taken from the second detection means based upon measurements taken from the first detection means.

Regarding claims 25-27, the Examiner stated that Igushi '480

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discloses that the first detection means comprises a large angle detector, wherein the large angle detector is situated substantially in the range 90 degrees to 0 degree or in the range of 70 degrees to 40 degrees from the axis of a beam of light emitted.

Regarding claims 28-32, the Examiner stated that Igushi '480 teaches that the second detection means comprises a back scatter detector which is situated at an obtuse angle from the axis of a beam of the light emitted from the light emitting means.

Regarding claims 19-21 and 32, the Examiner stated that Igushi '480 discloses that a plurality of the first and the second detection means are inclined symmetrically relative to the measurement zone.

Applicants maintain that the claimed invention is not rendered unpatentable by Igushi '480 because Igushi '480 fails to disclose or suggest each and every element of the claimed invention.

Claim 1 relates to a particle size distribution analysis apparatus which includes a sample measurement zone, a light emitting means and at least a first detection means. The sample measurement zone defines a sample of particles. The light emitting means provides a source of light incident upon the sample measurement zone. The first detection means measures light levels in the apparatus at particular scattering angles and outputs a signal to a computation means for calculating the particle size distribution enabling the particle size distribution of particles contained within the sample to be determined. The computation means calculates, in use, the particle size distribution taking into account, for each of the scattering angles, reflection, by at least one window of the

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measurement zone, of light that has previously been scattered by the particles.

Igushi '480, as understood by Applicants, relates to a particle size distribution analyzer which selects, disperses and supplies samples of a specified size for measurement. The analyzer apparatus includes a flow cell that can be illuminated with light so that suspended particles scatter at various angles. A detector unit measures the impact of light and thereby determines the particle sizes and the frequency of the particle sizes experienced in the sample.

However, it is clear from Igushi '480, column 4, lines 12 to 51, read in context with column 2, lines 24 to 33, which are cited in the December 4, 2002 Office Action, that Igushi '480 does not compensate for light reflected from at least one window of the measuring cell. According to Igushi '480, photosensors 26 are arranged to measure scattered light emitted from a monochrome source 29 and a ring shaped detector 25 is arranged to measure scattered light emitted from a laser 27. The two scattered light signals are then used to produce a compensation factor for light scattered from sub-micron particles thereby increasing the accuracy of particle size distributions determination for sub-micron particles as described in Igushi '480, column 4 lines 12 to 51 and at column 13, lines 13 to 47, which is cited in the Office Action. Additionally, references to multiple scattering in Igushi '480 clearly relate to inter-particle multiple scattering, and NOT scattering from windows of the measurement cell (see for example column 2 lines 10 to 23).

Since Igushi '480 does not disclose or suggest each and every feature of claim 1, it cannot render the claimed invention unpatentable.

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Independent claims 14 and 22 are believed to be patentable at least for similar reasons.

Regarding claims 2 and 23-33, Applicants respectfully point out that claims 2 and 23-33 depend on and include all the limitations of claim 1. Thus, claims 2 and 23-33 are patentable at least for the reasons set forth above with respect to claim 1.

Regarding claims 15-21, Applicants respectfully point out that claims 15-21 depend on and include all the limitations of claim 14. Thus, claims 15-21 are patentable at least for the reasons set forth above with respect to claim 14.

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 1, 2, 14-33 under 35 U.S.C. §102(b).

In view of the amendments to the claims and remarks hereinabove, Applicants maintain that claims 1, 2, 14-33 are now in condition for allowance. Accordingly, Applicants earnestly solicit the allowance of claims 1, 2, 14-33.

If a telephone interview would be of assistance in advancing prosecution of the subject application, Applicants' undersigned attorneys invite the Examiner to telephone them at the telephone number provided below.

If a petition for a further extension of time is required to make this response timely, this paper should be considered to be such a petition, and the Commissioner is authorized to charge the requisite fees to our Deposit Account No. 03-3125.

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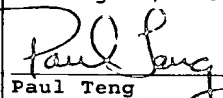
No fee, other than the enclosed \$110.00 fee for the one-month extension of time, is deemed necessary in connection with the filing of this Amendment. However, if any additional fee is required, authorization is hereby given to charge the amount of any such fee to Deposit Account No. 03-3125.

Respectfully submitted,



John P. White, Reg. No. 28,678  
Paul Teng, Reg. No. 40,837  
Attorneys for Applicants  
Cooper & Dunham, LLP  
1185 Avenue of the Americas  
New York, New York 10036  
(212) 278-0400

I hereby certify that this correspondence is being deposited this date with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231.



Paul Teng  
Reg. No. 40,837

March 21, 2003  
Date

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23. (Amended) An apparatus according to claim 2 wherein [said] an angle at which the second detection means is inclined relative to [a beam of light emitted from] an optical axis of said light emitting means is equal to  $180^{\circ}$  minus [the] an angle at which said first detection means is inclined relative to the [beam of light] optical axis.

Exhibit A

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C, 23. (Amended) An apparatus according to claim 2 wherein an angle at which the second detection means is inclined relative to an optical axis of said light emitting means is equal to  $180^\circ$  minus an angle at which said first detection means is inclined relative to the optical axis.